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09/638,032	08/15/2000	Toshiaki Kanemitsu		5400

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EXAMINER

SUHOL, DMITRY

ART UNIT	PAPER NUMBER
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3725

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/638,032
Filing Date: August 15, 2000
Appellant(s): KANEMITSU ET AL.

MAILED
JAN 25 2007
GROUP 3700

Felix J. D'Ambrosio
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed November 22nd, 2006 appealing from the Office action mailed September 1st, 2005, hereinafter "brief".

(1) Real Party In Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

Decision rendered by the Board on June 15, 2000 for parent application 08/841108.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 7-12 are rejected under 35USC 112, first paragraph. This rejection is set forth in the prior Office Action mailed September 1st, 2005 and is incorporated herein in its entirety by reference.

(10) Response to Argument

Prior to the discussion of Appellant's arguments it should be noted that current claims 7-12 and the current disclosure are identical to the finally presented claims 1-6 and associated disclosure of application 08/841108 whose claims were found to be lacking enablement in the Board Decision of June 15th, 2000.

Appellant's arguments begin at page 4 of the brief where it is argued that the claims do not state that the plate of the method is "drawn" but rather that it is curved and bent and that the limitations of curving and bending should not present a problem for the issue of enablement. Appellant's further argue that figures 1A-6B show that the flange portion and boss portion have the same thickness and that the disclosure at page 13, lines 6-11, page 6, lines 17-20 and page 18, lines 1-5 further support the above limitations. In response the examiner points out that (as stated in the decision rendered by the Board, June 15th, 2000, pages 5-6) the "curving" steps as claimed are described in the specification as drawing steps (see, e.g. page 10, line 22, page 11, lines 3 and

19, page 13, line 13 and page 14, line 22) and that the drawings can not serve to show dimensions unless expressly stated in the specification, see MPEP 2125, which states:

When the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value. See *Hockerson-Halberstadt, Inc. v. Avia Group Int 'l*, 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000) (The disclosure gave no indication that the drawings were drawn to scale. “[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.”).

In this case there is no mention that the drawings are to scale and therefore one can not read into any dimensionality which may or may not be present in the drawings.

Regarding the various passages pointed to by the appellant's, it is the examiners position that such passages in no way provide enablement for the flange portion and the boss portion having the same thickness, in fact as pointed out by the board in their decision of June 15th, 2000 “the original disclosure teaches that the original thickness of the blank is not decreased “so much” (Specification, page 18) in the course of production, but that is hardly a teaching that the boss, the annular flat portion and the peripheral wall have substantially the same thickness at the end of the process.” (see Board decision, page 7).

For the reasons noted above, the appellant arguments should be rejected.

The appellant's further make mention of the declaration of Mr. Takahashi. The declaration has been received and noted by the office, however it is pointed out that the declaration only discusses the patent to Neumeyer which is no longer part of the rejection and it is further pointed that that the declaration makes absolutely no mention

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or discussion of the appellants claimed invention, thus the declaration is not germane to the rejection at hand and does not serve to overcome the current rejections under 35 USC 112, 1st paragraph.

(11) Related Proceeding(s) Appendix


Copies of the court or Board decision(s) identified in the Related Appeals and Interferences section of this examiner's answer are provided herein.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



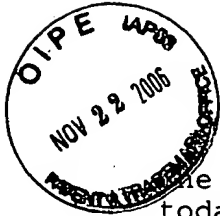
Dmitry Suhol
Primary Examiner
Art Unit 3725



Conferees:
Lowell Larson, SPE



Ashley Boyer, SPE



THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 36

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TOSHIAKI KANEMITSU and KAZUYUKI ODA

MAILED

Appeal No. 2000-0483
Application No. 08/841,108

JUN 15 2000

HEARD: MAY 16, 2000

**PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES**

Before CALVERT, FRANKFORT, and GONZALES, Administrative Patent Judges.

GONZALES, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1 through 6, which are all of the claims in the application.

JUN 19 2000

We AFFIRM and enter a new rejection pursuant to 37 CFR
§ 1.196(b).

The specification describes a method of producing a rotary member used, for example, as an inner wheel of a V-pulley or a rotor of an electromagnetic clutch (specification, page 1). The disclosed method includes the steps of: curving a metallic blank such that the blank is convex in the direction in which a boss is to project and bending, with the outer peripheral edge portion of the curved blank restrained from extending radially outward, the arcuate portion of the blank in the direction opposite to the convex direction thereof, so that a case-like boss having a bottom and an annular flat portion are formed (id. at 4).

A copy of the appealed claims appears in an appendix to the main brief (Paper No. 30).

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:¹

Neumeyer (German)	304,482	Nov. 7, 1916
Cros & Fils (Cros) (French)	989,543	Sep. 10, 1951

The following rejections are before us for review:

¹ In determining the teachings of Neumeyer and Cros, we will rely on the translations provided by the PTO. A copy of the translations are attached for the appellants' convenience.

claims 1 through 6 stand rejected under 35 U.S.C. § 112, first paragraph, as being based on a disclosure which, as filed, does not satisfy the description requirement in that paragraph; and,

claims 1 through 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Cros in view of Neumeyer.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 31) for the examiner's complete reasoning in support of the rejections, and to the main and reply briefs (Paper Nos. 30 and 32, respectively) for the appellants' arguments thereagainst.

OPINION

We have carefully reviewed the appellants' invention as described in the specification, the appealed claims, the prior art applied by the examiner, and the respective positions advanced by the appellants and the examiner. As a consequence of this review, we have made the determinations which follow.

We find that independent claims 1 and 2 under appeal lack written description support in the original disclosure.²

The written description requirement serves "to ensure that the inventor had possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him; how the specification accomplishes this is not material." In re Wertheim, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). In order to meet the written description requirement, the appellants do not have to utilize any particular form of disclosure to describe the subject matter claimed, but "the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." In re Gosteli, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989). Put another way, "the applicant must . . . convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention." Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). Finally, "[p]recisely how close the original description must come to comply with the

² We note that each of claims 1 and 2 includes the language "so that the boss is case-like having an annular flat portion." However, the annular flat portion 5 is formed in the blank, not in the boss 6. This informality is worthy of correction upon return of the application to the jurisdiction of the examiner.

description requirement of § 112 must be determined on a case-by-case basis." Eiselstein v. Frank, 52 F.3d 1035, 1039, 34 USPQ2d 1467, 1470 (Fed. Cir. 1995) (quoting Vas-Cath, 935 F.2d at 1561, 19 USPQ2d at 1116).

The examiner states (Answer, page 3) that "no clear disclosure is found of the boss [6] and annular flat portion [5] having substantially the same thickness" as recited in independent claims 1 and 2.³ We note, in fact, that claim 2 calls for the boss 6, the annular flat portion 5 and the case-like peripheral wall 7 to have substantially the same thickness.

We have reviewed the originally filed disclosure and note that the "curving" step of claim 1 and the "first curving step" of claim 2 are described at pages 10 and 11 of the specification as drawing steps (see, e.g., page 10, line 22 and page 11, lines 3 and 19).⁴ Likewise, the "second curving step" of claim 2 is described at pages 13 and 14 of the specification as a drawing

³ The present application was filed on April 30, 1997. The limitations in question were added to claims 1 and 2 by a preliminary amendment filed on June 26, 1997 (Paper No. 23).

⁴ In Mechanical Engineers' Handbook (Lionel S. Marks ed., 5th ed., 1951), page 1712 (copy of pp.1712-1716 attached) (hereinafter referred to as Marks), "drawing" is described as including:

. . . operations in which metal is pulled or drawn, in suitable containing tools, from flat sheets or blanks into cylindrical cups or rectangular or irregular shapes, deep or shallow.

step (see, e.g., page 13, line 13 and page 14, line 22). Figures 3A through 6B of the appellants' drawings depict cross-sectional views of the arcuate portion 1b of the blank being squeezed around a circular mandrel or punch 12a.⁵ The appellants' specification informs us that during the steps depicted in Figures 3A through 6B, the peripheral edge portion 1e is restrained by the annular projection 12c of lower mold 12 from extending outwardly, preventing the material of the blank from flowing in the radially outward direction and causing the material to flow toward the case-like boss. Thus, according to the appellants' specification, the case-like boss is thickened.

It is clear from the original disclosure that some material flow occurs as a result of the various deforming steps depicted in the appellants' Figures 1A to 7B. Claim 1 calls for the boss 6 and annular flat portion 5 to have substantially the same thickness.⁶ Claim 2 calls for the boss 6, the annular flat portion 5 and the peripheral wall 7 to have substantially the

⁵ Marks, at page 1714, describes "squeezing" as a group of metal working operations in which the metal is worked in compression.

⁶ At the oral hearing, the appellants indicated that the words "substantially the same thickness" mean equal thickness and minor or inconsequential deviations therefrom (see, also, the main brief, page 9, wherein the appellants argue that one of the differences between the claimed invention and the applied prior art is that the prior art lacks a bending step that would result in a rotary member with a boss and flange of equal thickness).

same thickness. We find no express teaching in the original disclosure, including the original claims, that at the end of the appellants' process the boss 6 and the annular flat portion 5 or the boss 6, the annular flat portion 5 and the peripheral wall 7 have substantially the same thickness.

Instead of an express disclosure, a disclosure may be inherent. In order for a disclosure to be inherent, however, the missing descriptive matter must necessarily be present in the original disclosure of the application such that one skilled in the art would recognize such a disclosure. See Continental Can Co. USA v. Monsanto Co., 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). There is nothing in the original disclosure suggesting, much less necessarily requiring, that the boss 6 and the annular flat portion 5 or the boss 6, the annular flat portion 5 and the peripheral wall 7 have substantially the same thickness at the end of the appellants' process. At best, the original disclosure teaches that the original thickness of the blank is not decreased "so much" (Specification, page 18) in the course of production, but that is hardly a teaching that the boss, the annular flat portion and the peripheral wall have substantially the same thickness at the end of the process.

Therefore, we find no inherent teaching in the original disclosure of the limitations of claims 1 and 2 in question.

For the reasons set forth above, the original disclosure of the application does not provide written description support for the later-claimed subject matter of the claims under appeal.

The appellants cite (Main Brief, pages 7-8) specific passages from pages 6, 13 and 18 of the specification and argue that ". . . the specification is sufficiently clear to support [the] boss-flange thickness feature of the invention" For the reasons set forth above, we disagree.

In view of the above, we affirm the rejection of the appellants' claims 1 and 2 under 35 U.S.C. § 112, first paragraph. Since claims 3 and 6, dependent on claim 1, and claims 4 and 5, dependent on claim 2, include the language of their respective parent claims, it follows that the rejection of claims 3 through 6 is likewise affirmed.

We will not sustain the standing rejection of claims 1 through 6 under 35 U.S.C. § 103.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness

is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. See In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968).

With this as background, we turn to the examiner's rejection of claims 1 through 6 under 35 U.S.C. § 103 as being unpatentable over Cros in view of Neumeyer.

The examiner determined that Cros discloses shaping a plate-like blank to form a rotary member product having a central boss and a concentric peripheral wall by incremental drawing steps using plural molds (Answer, page 4). The examiner describes Neumeyer as disclosing the preliminary step of forming a convex profile in a plate-like blank which is subsequently shaped by

bending in a mold having a shoulder d to restrain the outer peripheral edge of the blank and notes Neumeyer's teaching that as a result of the preliminary formation of the convex profile, the material of the blank is only slightly thinned and excessive stressing or tearing of the material is prevented. The examiner concluded that "[i]t would have been obvious . . . to form the Cros boss by the forming steps taught by Neumeyer, i.e., by first forming a convex profile and subsequently bending in a mold with restraint of the outer peripheral edge, following the suggestion of Neumeyer . . . " (id.)

The appellants argue (Main Brief, page 6) that Cros stretches the boss during the stamping steps depicted in Cros' Figures 7-10 and, as a result, the wall thickness of the boss and that of the flange is no longer equal.⁷ The appellants also argue (id. at 6-7) that Neumeyer's flange will thicken relative to the boss as the die e bends disk a over the mandrel c.

We note that Neumeyer specifically teaches that the bore of the die e exceeds the diameter of the mandrel c by an amount equal to the thickness of the disk a which prevents the stretching of the material of the plate a (Translation, pages 2-

⁷ According to Marks, page 1716, "stamping" is a type of squeezing operation.

3). Thus, while we do not necessarily agree with the appellants' characterization of Neumeyer, we do agree with the appellants' argument (Main Brief, page 9) that neither reference necessarily teaches nor suggests a boss and flange of equal thickness.

Neumeyer discloses a preliminary step in which the blank a is put in a press to form an arcuate portion. We understand that the "pressing" operation referred to in Neumeyer is actually a drawing operation. It is a known fact that plastic flow is a characteristic of all drawing operations.⁸ In fact, Neumeyer acknowledges (Translation, page 2) that the blank undergoes a slight change in thickness as a result of this preliminary step. We also conclude, based on Cros' drawings, that the transformation of the flat metal blank shown in Figure 2 to the stamping e depicted in Figure 13 necessarily requires some stretching or thinning of the blank. Thus, plastic flow is an inherent result of the processes disclosed in the applied references. To what extent the material flows in either reference is a matter of speculation. Certainly, there is no clear teaching or suggestion in either Cros or Neumeyer that the boss b and annular flat portion a¹ shown in Figure 10 of Cros or

⁸ Myron L. Begeman et al. Manufacturing Processes 234 (1963). For the appellants' convenience, a copy of pages 232-237 are enclosed with this decision.

the boss and annular flat portion shown in Figure 3 of Neumeyer have substantially the same thickness. Thus, the rejection is founded on speculation rather than on fact. While we appreciate that Neumeyer teaches that as a result of the process disclosed therein the material is "only slightly thinned" (Translation, page 2), it is our determination that this teaching is no more suggestive of the boss and annular flat portion having substantially the same thickness than the appellants' teaching that the original thickness is "not decreased so much" (Specification, page 18).

Further, contrary to the examiner's suggestion, Neumeyer does not teach that providing an outer edge d of the die that is higher than the edge of the plate a will prevent stretching of the material. Rather, Neumeyer teaches (Translation, pages 2-3) that stretching of the material is prevented as a result of the bore of the press die e exceeding the diameter of the mandrel c by an amount equal to the thickness of the disk a and that outer edge d keeps the edge of the plate a from "evading" (moving).

At any rate, even if it had been obvious to a person of ordinary skill in the art to provide an outer edge about the clamping flange h in Cros higher than the edge of the plate or blank a in order to prevent the edge of the plate from moving, as

suggested by Neumeyer, it does not follow that the stamping e in Cros' Figure 13 would necessarily have had a boss b and flange of equal thickness.

In light of the foregoing, we will not sustain the standing 35 U.S.C. § 103 rejection of claims 1 through 6.

NEW GROUND OF REJECTION

In accordance with our authority under 37 CFR § 1.196(b), this panel of the board introduces the following new ground of rejection.

Claims 1 through 6 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

An analysis of whether the claims under appeal are supported by an enabling disclosure requires a determination of whether that disclosure contained sufficient information regarding the subject matter of the appealed claims as to enable one skilled in the pertinent art to make and use the claimed invention. The test for enablement is whether one skilled in the art could make and use the claimed invention from the disclosure coupled with

information known in the art without undue experimentation. See United States v. Telectronics, Inc., 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988), cert. denied, 109 S.Ct. 1954 (1989); In re Stephens, 529 F.2d 1343, 1345, 188 USPQ 659, 661 (CCPA 1976).

All of the claims call for curving a plate-like metallic blank such that the blank is convex and restraining the outer peripheral edge portion of the curved blank from extending radially outward while bending the blank in a direction opposite to the convex direction using a plurality of molds to gradually reduce the boss to form a case-like boss and an annular flat portion, the boss and annular flat portion having substantially the same thickness. The specification describes the "curving" step illustrated in Figures 1A-2B as a drawing operation. It is well known in the art that all drawing operations involve material flow.⁹ The specification does not teach how the metallic blank can be drawn, while at the same time producing a final rotary member which includes a boss and an annular flange of equal thickness.

⁹ See footnote 7, supra.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 through 6 under 35 U.S.C. § 112, first paragraph, is affirmed, but the decision of the examiner to reject claims 1 through 6 under 35 U.S.C. § 103 is reversed.

Additionally, this panel of the board has introduced a new ground of rejection pursuant to 37 CFR § 1.196(b).

Since at least one rejection of each of the appealed claims has been affirmed, the decision of the examiner is affirmed.

In addition to affirming the examiner's rejection of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that "[a] new ground of rejection shall not be considered final for purposes of judicial review."

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

(b) Appellant may file a single request for rehearing within two months from the date of the original decision. . . .

37 CFR § 1.196(b) also provides that the appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of

the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

Should the appellants elect to prosecute further before the Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellants elect prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).


AFFIRMED
37 CFR 1.196(b)

Ian A Calvert
IAN A. CALVERT

IAN A. CALVERT
Administrative Patent Judge

Charles E. Frankfort

CHARLES E. FRANKFORT
Administrative Patent Judge


JOHN F. GONZALES
Administrative Patent Judge

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Appeal No. 2000-0483
Application No. 08/841,108

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